SECTION 3: EVALUATION OF PROGRESSED STRATEGIES

The previous section of this report described the process used to screen the initial list of strategies and actions that were developed during the project. This section describes the second stage of the evaluation process, which was completed for more than fifty separate actions that were progressed to this stage.

The second phase of the evaluation included an assessment of twenty-nine factors in five general categories of concern: traffic/safety/multimodal, social/land use, environmental, infrastructure, and cost/construction. These general categories are described below.

- **Traffic/Safety/Multimodal —** The assessment of traffic issues includes an evaluation of access and the effect on overall traffic operations, particularly capacity and associated congestion. Safety factors consider whether a proposed strategy will reduce the opportunity for accidents or create additional conflict points. The multimodal evaluation considers the effect the strategy has on public transportation, pedestrians, and bicyclists. For example, a proposed center-raised median would reduce the number of conflict points for vehicles entering and exiting Route 22 and would, therefore, reduce congestion and the number of potential accidents. A center median would also require widening of the roadway, thus lengthening the distance that pedestrians have to cross. However, the additional crossing distance would be offset by the fact that the median offers a safe place for pedestrians to rest and wait for a gap in traffic.

- **Social/Land Use —** The assessment of social factors includes identification of potential land takings, changes in neighborhoods, community acceptability, and potential impacts to the character of the area. Land use factors include effects on land use and zoning and development potential. The center-raised median example would potentially result in additional land taking. It would also impact the development potential of adjacent parcels, which would have limited access from Route 22 due to the presence of a raised median.

- **Environmental —** The assessment of environmental factors includes the effect on open space and the visual character of the area. It also identifies potential effects on air and water quality, noise, wetlands, and wildlife. In the center-raised median example, the roadway widening could have a slight negative impact on open space and wetlands, depending on the proposed location. It also could have a significant visual impact, since its urban characteristics are out of context in a rural environment. As indicated previously, a center-raised median is expected to reduce vehicle congestion and, as a result, will also reduce potential impacts to air and noise quality.

- **Infrastructure —** The assessment of infrastructure factors takes into account maintenance and operational issues and cost. It also considers the strategy's effect on drainage, utilities, and other public infrastructure such as roads or bridges. Regarding the center-raised median example, the greatest impact would be on drainage. Drainage issues would be addressed in the design and would be an initial one-time cost. There would also be on-going maintenance costs for landscaping and snow removal at pedestrian crosswalks through the median.

- **Cost/Construction** — The assessment of construction factors includes acquisition of additional right-of-way, technical requirements for construction (constructability), construction impacts such as detours or road closures, and construction cost. A separate cost factor considered in the evaluation process is the cost of consultants. The center-raised median, for example, could potentially

require additional right-of-way to widen the road. It would also require closure of a lane during construction. Consultant costs would be incurred for the design, with a separate cost rating for construction. The costs considered were those that would potentially be incurred by the municipalities. Some of the improvements would take place as part of a state highway project in which the municipality may only contribute a local share to the funds.

Table 2 summarizes the second stage of the evaluation process. As strategies were progressed, some were combined for evaluation purposes, as shown in the table. The grouping does not indicate that they will be progressed as recommendations in the same format.

For each evaluation factor, the strategy was assigned a rating from –3 to 2 that indicates the potential impact of implementation. The rankings are generalized; actual impacts of specific projects could be different:

(2) Benefit

(1) Some Benefit

(0) No Impact

(-1) Slight Adverse Impact

(-2) Moderate Adverse Impact

(-3) High Adverse Impact

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Table 2: Strategy Evaluation Matrix

Strategies to Be Progressed	SUMMARY	Traffic/Safety/Multimodal: Congestion	Local Access	Safety	Transit	Pedestrian Mobility/ Accessibility	Bicycling Space	Social/Land Use: Development Potential	Land Use Compatibility	Farmland	Relocation	Village/Hamlet	Community Acceptability	Economic	Historic/ Architectural/ Cultural	Environmental: Green Space/ Open Space	Air Quality	Noise	Wetlands/ Floodplains	Visual	Water Quality	Wild Life	Infrastructure: Maintenance	Drainage	Utilities & Infrastructure	Cost/Construction: Right-of-Way	Constructability	Construction Impacts	Construction Costs ($ million)	Consultant Cost
1.0 Growth in Defined Areas																														
1.1 Define Priority Growth Area	12	2	0	0	1	2	0	-2	0	2	0	2	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-1
1.1.1 Mixed-use zoning	13	2	0	1	1	2	0	2	0	0	0	2	1	1	1	0	0	0	0	1	0	0	0	0	-1	0	0	0	0	-1
1.1.2 Density bonus	2	-1	0	0	1	1	0	1	0	0	0	1	1	2	0	0	-1	-1	0	0	0	0	0	0	-2	0	0	0	0	-1
1.1.3 Infrastructure provision	3	0	0	0	0	0	0	2	0	0	0	1	-1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-3	-1
2.0 Open Space Preservation																														
2.1 Designate Greenbelts																														
2.1.1 Cluster by-law/Overlay district	7	1	-1	1	1	0	0	0	0	1	0	0	1	-1	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2.1.2 Lease development rights	10	1	0	1	0	0	0	-1	1	2	0	0	1	-1	0	1	1	1	0	2	0	1	0	0	0	0	0	0	-2	-1
2.1.3 Transfer development rights	13	1	0	1	0	0	0	0	1	2	0	1	1	0	0	1	1	1	0	2	0	1	0	0	0	0	0	0	0	-1
2.1.4 Land acquisition through existing land trusts	13	1	0	1	0	0	0	0	1	2	-1	0	0	-1	0	2	2	2	0	2	0	2	0	0	0	0	0	0	-3	0
3.0 Harlem Valley Transportation Plan																														
3.1 Cross-section guidelines																														
3.1.1 Rural	10	2	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	-1	-1	-1
3.1.2 Highway commercial																														
3.1.2.1 Divided	9	2	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	-1	-1	-1	-1	-1
3.1.2.2 Undivided	9	2	2	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	-1	-1	-1	-1	-1
3.1.3 Village/hamlet	8	2	2	2	1	2	2	0	0	0	0	1	0	0	-1	0	0	0	0	0	0	0	1	1	1	-2	-1	-1	-1	-1
3.2 Roadway connections																														
3.2.1 Provide secondary access roads	3	2	2	0	0	1	0	1	0	0	0	0	1	-1	0	0	0	0	0	0	0	0	-2	0	-1	0	0	0	0	0
3.2.2 Encourage grid system	3	2	2	0	0	1	0	1	0	0	0	0	1	-1	0	0	0	0	0	0	0	0	-2	0	-1	0	0	0	0	0
3.3 Capacity Improvements																														
Short-term Capacity Improvements																														
3.3.1 Aikendale Road, Pawling	6	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	-1
3.3.2 Coulter Avenue/Pine Street, Pawling	7	2	0	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	-1
3.3.3 Mill Street, Dover	5	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	-1
Long-term Capacity Improvements																														
3.3.4 CR 67 (Quaker Hill Road)/East Main Street, Pawling	-1	2	0	2	1	1	1	0	0	0	0	0	0	0	-2	-1	1	1	0	-1	0	0	0	0	0	-2	-1	-1	-1	-1
3.3.5 CR 21 (Pleasant Ridge Road), Dover	3	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	-1	-1
3.3.6 Mill Street, Dover	4	2	0	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	-1	-1	-1	-1	-1
3.3.7 Route 44/Route 343, Amenia	3	2	0	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	-2	-1	-1	-1	-1
3.3.8 Route 44 (Main Street), Millerton	0	2	0	2	0	2	1	0	0	0	-2	0	0	0	0	0	1	1	0	0	0	0	0	0	0	-3	-1	-1	-1	-1
3.4 Safety Improvements																														
Intersections with Route 22																														
3.4.1 Aikendale Road, Pawling	3	1	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1
3.4.2 CR 67 (Quaker Hill Road)/East Main Street, Pawling	-2	1	1	2	0	1	1	0	0	0	-2	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	-2	-1	0	-1	-1
3.4.3 Coulter Avenue/Pine Street, Pawling	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1	-1
3.4.4 Kitchen Road, Dover	-2	-1	0	2	-1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1
3.4.5 CR 26 (Cricket Hill Road), Dover	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1
3.4.6 Sherman Hill Road, Dover	-7	0	0	2	0	0	0	0	-1	0	0	0	0	0	0	-2	0	0	0	-1	0	0	1	0	0	-2	-1	-1	-1	-1
3.4.7 Dover High School, Dover	3	1	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	-1
3.4.8 Dover Furnace Road, Dover	-7	0	0	2	0	0	0	0	-1	0	0	0	0	0	0	-2	0	0	0	-1	0	0	1	0	0	-2	-1	-1	-1	-1
3.4.9 Oniontown Road, Dover	4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
3.4.10 CR 105 (Sinpatch Road), Amenia	0	0	0	2	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	-1	-1
3.4.11 CR 81 (Old Route 22), Amenia	-3	0	0	2	0	1	1	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	-2	-1	-1	-1	-1
3.4.12 Haight Road, North East	3	1	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	-1
3.4.13 Downey Road, North East	-1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	-1
3.4.14 Route 199, North East	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	-1	-1	-1
3.4.15 Route 44/Route 22, Millerton	8	2	0	2	0	2	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	-1
Highway Segments along Route 22																														
3.4.16 Dover High School to East Duncan Hill Road, Dover	0	2	1	2	1	1	1	0	0	0	0	0	0	0	0	-1	0	0	0	-1	0	0	0	0	0	-2	-1	-1	-1	-1
3.4.17 Crossing Swamp River, Dover	0	2	1	2	1	1	1	0	0	0	0	0	0	0	0	-1	0	0	0	-1	0	0	0	0	0	-2	-1	-1	-1	-1
3.4.18 Grand Union to McDonald's, Dover	3	2	2	2	1	1	1	0	-1	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	0	-1	0	-1	-1	-1
4.0 Design Guidelines	11	0	-1	1	1	2	2	-1	1	0	0	2	2	-1	2	1	0	0	0	2	0	0	-1	0	0	0	0	0	0	-1
5.0 Access Management																														
5.1 Incorporate access management tools into site plan review and sub-division regulations	8	0	0	0	0	0	0	0	0	1	1	1	2	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
5.1.1 Shared driveways	4	2	-1	2	0	0	0	-1	0	0	0	0	1	-1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5.1.2 Shared parking/ connections	6	1	1	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RATING: Benefit (2); Some Benefit (1); No Impact (0); Slight Adverse Impact (-1); Moderate Adverse Impact (-2); High Adverse Impact (-3)
COST: Low, <$100,000 (-1); Moderate, $100,000-$499,000 (-2); High, >$500,000 (-3)

Strategies to Be Progressed			Evaluation Factors																														
				Traffic/Safety/Multimodal						Social/Land Use								Environmental							Infrastructure			Cost/Construction				
			SUMMARY	Congestion	Local Access	Safety	Transit	Pedestrian Mobility/ Accessibility	Bicycling Space	Development Potential	Land Use Compatibility	Farmland	Relocation	Village/Hamlet	Community Acceptability	Economic	Historic/ Architectural/ Cultural	Green Space/ Open Space	Air Quality	Noise	Wetlands/ Floodplains	Visual	Water Quality	Wild Life	Maintenance	Drainage	Utilities & Infrastructure	Right-of-Way	Constructability	Construction Impacts	Construction Costs ($ million)	Consultant Cost
	5.1.3	Rear/side parking	4	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
	5.1.4	Corner sight distance	2	0	0	2	0	0	0	-1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	-1	0	0	0	0	0	0	0	0
	5.1.5	Increase driveway setback from intersection	2	1	-1	2	0	0	0	-1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
	5.2	Define/limit number of driveways through a Limited Access Overlay District	7	2	-1	2	0	1	1	-1	0	0	0	0	2	-1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	-1
6.0	Signage																																
	6.1	Signage design guidelines	4	0	0	1	0	0	0	0	0	0	0	0	2	-1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	-1
	6.2	Harlem Valley Signage Plan	3	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-1
7.0	Pedestrian/Bicycle Safety & Mobility																																
	7.1	Sidewalks in growth areas -- 0.5-mile radius	7	1	0	2	0	2	0	0	0	0	0	2	2	-1	0	0	0	0	0	1	0	0	-2	0	0	0	0	-1	0	0	0
	7.2	Village Traffic Calming	2	0	-1	1	0	1	-1	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	-1	-2	0	0
	7.3	Pedestrian/Bicycle connections in key locations																															
	7.3.1	Dover Plains to Tally Ho Mobile Home Park, Dover	4	0	0	1	0	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0
	7.3.2	Amenia hamlet north to Maplebrook School, Amenia	4	0	0	1	0	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0
	7.3.3	Route 22 at CR 67 (Quaker Hill Rd.) to Pawling Metro-North RR Station via Main St., Pawling (bicycle only)	5	0	0	1	1	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0
	7.3.4	CR 4 (Poplar Hill Rd.) to Tenmile River Metro-North RR Station via CR 5 (Sinpatch Rd.), Amenia (bicycle only)	5	0	0	1	1	1	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0
	7.3.5	Route 343 to HVRT along Mechanic Street, North East (bicycle only)	5	0	0	1	0	1	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	-1	0	0	0	0	0	-1	0	0

RATING: Benefit (2); Some Benefit (1); No Impact (0); Slight Adverse Impact (-1); Moderate Adverse Impact (-2); High Adverse Impact (-3)
COST: Low, <$100,000 (-1); Moderate, $100,000-$499,000 (-2); High, >$500,000 (-3)

The probable costs are based on planning level estimates and are ranked from –3 to –1 as follows:

(-1) Low, less than $100,000

(-2) Moderate, $101,000 to $499,000

(-3) High, greater than $500,000

The final section of the report, Plan Recommendations, summarizes the final recommendations of the Route 22 Corridor Management Plan.

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